- Low cost private hangars will be constructed for existing or additional tenants and paved tiedowns will replace the existing turf parking area for existing tenants.

The forecast associated with Scenario 1 is provided in Table 2-5.

TABLE 2-5 BASELINE SCENARIO		
Year	**Based**	**Operations**
2010	31	25,700
2015	31	26,300
2020	32	27,000
2023	33	27,700
2030	33	28,500
Change	**6%**	**11%**
Note: Operations rounded		

Assumptions: Scenario 2 –Growth

- New tenants will be attracted to Ellington Airport through natural growth and by the construction of additional hangar units.
- The increase in the runway length (from 1,800 feet to 2,500 feet) will have a positive impact on based aircraft and annual operations.
- The level of growth is based on baseline forecasts as summarized in Appendix H, with additional helicopter, ultralight, multi-engine, and single-engine aircraft over the study period.

The forecast associated with Scenario 2 is provided in Table 2-6.

TABLE 2-6 GROWTH SCENARIO		
Year	**Based**	**Operations**
2010	31	25,700
2015	34	27,300
2020	36	29,700
2023	37	30,600
2030	38	31,600
Change	**23%**	**23%**
Note: Operations rounded		

Assumptions: Scenario 3 – Decline

- Total airport based aircraft and operations will decline due to continued poor market trends.
- No new hangars will be constructed, but paved tiedowns will replace the existing turf parking area for existing tenants.

The forecast associated with Scenario 3 is provided in Table 2-7.

TABLE 2-7 DECLINE SCENARIO		
Year	**Based**	**Operations**
2010	31	25,700
2015	29	24,800
2020	28	23,800
2023	27	21,600
2030	25	20,900
Change	**-19%**	**-19%**
Note: Operations rounded		

3.0 FINANCIAL FEASIBILITY INVENTORY

This chapter provides the financial feasibility analysis for the potential purchase of Ellington Airport by the Town of Ellington. The feasibility analysis is to be used as a decision support tool for the Town, and includes an analysis of the current (2010) fiscal structure and market position of the Airport. This chapter further reviews how the potential municipal ownership may influence the Airport's fiscal impact. The analysis includes an examination of the following elements:

- Local and Regional Economic Conditions
- Municipal Financial Conditions
- Airport Economic Impact
- Airport Financial Conditions
- Airport Market Conditions
- Airport Financial Feasibility

In order to obtain data and information for this analysis, five approaches were relied upon. The first consisted of an analysis of municipal financial information for the Town of Ellington as well as interviews with municipal officials. The second method included interviews with the owner of the Airport (JLM Associates LLC) as well as a review of Airport financial documents. The third method involved an analysis of economic data provided by the Connecticut Department of Labor (CTDOL). The fourth method involved interviews with owners, operators and users of competitive airports to the Ellington Airport within the greater Hartford and south-central Massachusetts regions. The final method included an assessment of local and regional real estate market conditions based on a review of primary and secondary market information.

The following sections includes a review of municipal financial conditions for the Town of Ellington, a summary of regional economic and airport market conditions, followed by a projection of future airport financial conditions based on current demand conditions, and an analysis of alternative uses for the airport property.

3.1 Local and Regional Economic Conditions

Local At-Place Employment

According to at-place employment estimates provided by the CTDOL, the Town had a 2008 employment base of 2,859 jobs representing an increase of 263 jobs (10 percent) since 2000. As shown in Table 3-1, the sectors which experienced the largest job growth included construction (122 jobs or 249 percent) and real estate rental and leasing (21 jobs or 68 percent). Sectors experiencing reductions in employment included wholesale trade (44 jobs or 51 percent) and manufacturing (76 jobs or 13 percent).

Over the same time period, Tolland County's employment base increased by about 3,900 jobs representing an increase of 10 percent - virtually identical to the Town's. The transportation and warehousing (593 jobs or 171 percent), educational services (87 jobs or 46 percent) and health care and social assistance (1,016 jobs or 23 percent) sectors experienced the largest job growth,

while the mining (44 jobs or 51 percent) and manufacturing (386 jobs or 10 percent) sectors experienced the largest job losses in the county over the 2000 to 2008 time period. Table 3-1 shows at-place employment trends for the Town and Tolland County.

Business Establishments

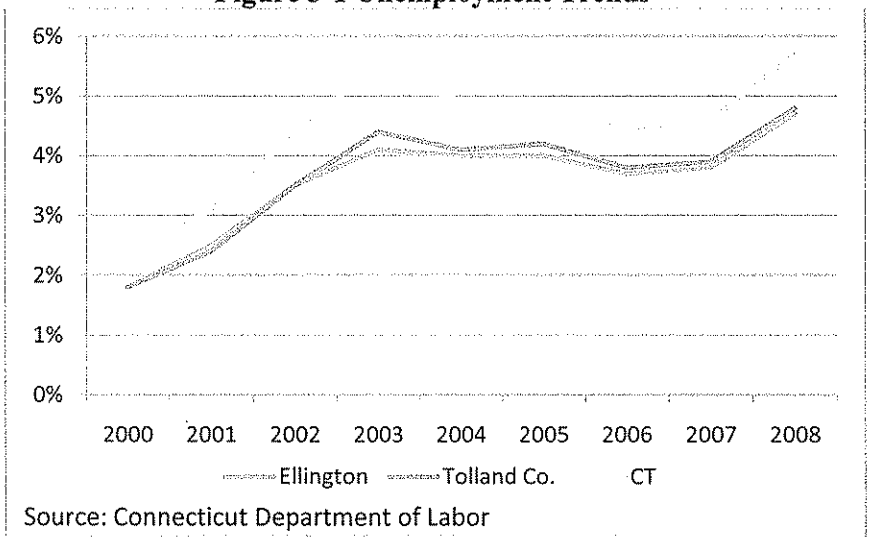
As shown in Table 3-2, the Town had a 2008 business establishment base of 302, representing an increase of 34 firms (13 percent) since 2000. Although some of the establishment data for the Town is suppressed by the CTDOL due to confidentiality reasons, about three-quarters of the new businesses added were in the construction, wholesale trade and other services sectors. Sectors which lost firms included manufacturing (3 firms) and government (2 firms).

Over the same time period, Tolland County's business establishment base increased by 205 firms or 7 percent, about six percentage points below the growth experienced in Ellington. The administration support and waste management (58 firms or 50 percent) and wholesale trade (62 firms or 43 percent) sectors experienced the most growth, while the mining (3 firms or 38 percent) and manufacturing (15 firms or 10 percent) sectors experienced the largest declines in business establishments.

Unemployment

Based on the latest available (November 2009) data provided by the CTDOL, Ellington had an unemployment rate of 6.5 percent, identical to Tolland County's rate and 1.4 percentage points below the statewide average. Over the 2000 to 2008 time period, Ellington's average unemployment rate (3.6 percent) was 0.1 percentage points below the County's average rate, and almost one full percentage point below the statewide average over the same time period. Figure 3-1 shows unemployment rate trends for Ellington, Tolland County and Connecticut between 2000 and 2008.

Figure 3-1 Unemployment Trends



Source: Connecticut Department of Labor

TABLE 3-1 AT-PLACE EMPLOYMENT				
Town of Ellington				
	2000	2008	# Change	% Change
Construction	49	171	122	249.0%
Manufacturing	569	493	-76	-13.4%
Wholesale Trade	87	43	-44	-50.6%
Retail Trade	459	562	103	22.4%
Transport & Warehousing	N/A	30	N/A	N/A
Information	N/A	N/A	N/A	N/A
Finance & Insurance	39	37	-2	-5.1%
Real Estate Rental & Leasing	31	52	21	67.7%
Prof., Scientific & Tech. Services	55	62	7	12.7%
Mgt. of Companies & Enterprises	N/A	N/A	N/A	N/A
Admin. Support & Waste Mgt.	158	194	36	22.8%
Educational Services	N/A	20	N/A	N/A
Health Care & Social Assistance	126	168	42	33.3%
Arts, Entertainment & Rec.	N/A	N/A	N/A	N/A
Accommodation & Food Services	119	149	30	25.2%
Other Services	64	85	21	32.8%
Unclassifiable	N/A	N/A	N/A	N/A
Government	492	659	167	33.9%
Total	2,596	2,859	263	10.1%
Tolland County				
	2000	2008	# Change	% Change
Ag/Forest/Fishing	370	382	12	3.2%
Mining	87	43	-44	-50.6%
Utilities	N/A	N/A	N/A	N/A
Construction	1,796	1,813	17	0.9%
Manufacturing	3,978	3,592	-386	-9.7%
Wholesale Trade	640	752	112	17.5%
Retail Trade	4,639	4,878	239	5.2%
Transport & Warehousing	346	939	593	171.4%
Information	623	580	-43	-6.9%
Finance & Insurance	691	641	-50	-7.2%
Real Estate Rental & Leasing	343	366	23	6.7%
Prof., Scientific & Tech. Services	1,148	1,175	27	2.4%
Mgt. of Companies & Enterprises	N/A	N/A	N/A	N/A
Admin. Support & Waste Mgt.	1,004	1,195	191	19.0%
Educational Services	191	278	87	45.5%
Health Care & Social Assistance	4,468	5,484	1,016	22.7%
Arts, Entertainment & Rec.	492	519	27	5.5%
Accommodation & Food Services	3,187	3,522	335	10.5%
Other Services	1,295	1,479	184	14.2%
Unclassifiable	N/A	N/A	N/A	N/A
Government	12,198	13,690	1,492	12.2%
Total	37,698	41,606	3,908	10.4%
Source: Connecticut Department of Labor				

TABLE 3-2 BUSINESS ESTABLISHMENTS				
Town of Ellington				
	2000	2008	# Change	% Change
Construction	49	58	9	18.4%
Manufacturing	27	24	-3	-11.1%
Wholesale Trade	16	25	9	56.3%
Retail Trade	37	37	0	0.0%
Transport & Warehousing	N/A	3	N/A	N/A
Information	N/A	N/A	N/A	N/A
Finance & Insurance	9	12	3	33.3%
Real Estate Rental & Leasing	6	7	1	16.7%
Prof., Scientific & Tech. Services	20	21	1	5.0%
Mgt. of Companies & Enterprises	N/A	N/A	N/A	N/A
Admin. Support & Waste Mgt.	19	21	2	10.5%
Educational Services	N/A	5	N/A	N/A
Health Care & Social Assistance	14	17	3	21.4%
Arts, Entertainment & Rec.	N/A	N/A	N/A	N/A
Accommodation & Food Services	13	15	2	15.4%
Other Services	20	29	9	45.0%
Unclassifiable	N/A	N/A	N/A	N/A
Government	19	17	-2	-10.5%
Total	268	302	34	12.7%
Tolland County				
	2000	2008	# Change	% Change
Ag/Forest/Fishing	26	28	2	7.7%
Mining	8	5	-3	-37.5%
Utilities	N/A	N/A	N/A	N/A
Construction	384	410	26	6.8%
Manufacturing	150	135	-15	-10.0%
Wholesale Trade	144	206	62	43.1%
Retail Trade	386	378	-8	-2.1%
Transport & Warehousing	45	42	-3	-6.7%
Information	31	29	-2	-6.5%
Finance & Insurance	122	133	11	9.0%
Real Estate Rental & Leasing	97	100	3	3.1%
Prof., Scientific & Tech. Services	254	274	20	7.9%
Mgt. of Companies & Enterprises	N/A	N/A	N/A	N/A
Admin. Support & Waste Mgt.	116	174	58	50.0%
Educational Services	27	33	6	22.2%
Health Care & Social Assistance	244	274	30	12.3%
Arts, Entertainment & Rec.	41	43	2	4.9%
Accommodation & Food Services	184	201	17	9.2%
Other Services	319	331	12	3.8%
Unclassifiable	N/A	N/A	N/A	N/A
Government	222	211	-11	-5.0%
Total	2,806	3,011	205	7.3%
Source: Connecticut Department of Labor				

3.2 Municipal Financial Conditions

Municipal Revenue Trends

The Town of Ellington had fiscal year (FY) 2008 revenues of $42.7 million, an increase of about $7.8 million (22.4 percent) from FY 2005 (about $2 million or 5.6 percent per year). As shown in Table 3-1, property taxes represented over 69 percent of the Town's revenue base in FY 2008 – a proportion that has remained stable since FY 2005.

As shown in Table 3-3, interest and dividends revenue increased by over 188 percent between FY 2005 and FY 2008, by far the largest percent increase of any of the Town's revenue sources. The largest portion of the Town's revenue base (property taxes and intergovernmental transfers) each increased by approximately 21 percent over the time period.

TABLE 3-3 MUNICIPAL REVENUE TRENDS

	FY 2005	FY 2006	FY 2007	FY 2008	$ Change 05-08	% Change 05-08
Property Taxes	$24,298,470	$26,162,057	$27,985,918	$29,337,476	$5,039,006	20.7%
Intergovernmental	$9,051,842	$9,474,757	$9,421,069	$10,945,490	$1,893,648	20.9%
Charges for Goods and Services	$1,033,371	$1,317,374	$1,311,782	$1,148,549	$115,178	11.1%
Interest and Dividends	$135,362	$273,714	$453,367	$389,893	$254,531	188.0%
Other Revenues	$375,231	$702,401	$631,545	$879,694	$504,463	134.4%
Total	$34,894,276	$37,930,303	$39,803,681	$42,701,102	$7,806,826	22.4%

Source: Town of Ellington Basic Financial Statements and Supplemental Schedules

Municipal Expenditure Trends

The Town of Ellington had expenditures of $41.2 million in FY 2008, an increase of about $5.7 million (16 percent) from FY 2005 (about $1.4 million or 4 percent per year). Education represented about 65 percent of the Town's expenditure base in FY 2008, which was identical to FY 2005. As shown in Table 3-4, expenditures for the recreation (35 percent) and library (31 percent) departments experienced the largest increase of any budget line items between FY 2005 and FY 2008.

Grand List Trends

The grand list is the primary source of revenue for the Town and represents the value of real property, personal property and motor vehicles as realized each year as of October 1st. Based on the most current information available, Ellington's grand list totaled $1.22 billion in 2007 with approximately 89 percent of the total attributed to real estate. Since 2004, the grand list has increased by approximately $465 million (61 percent) with real estate consistently representing between 85 percent and 89 percent of the total. Table 3-5 shows the Town's grand list trends between 2004 and 2007.

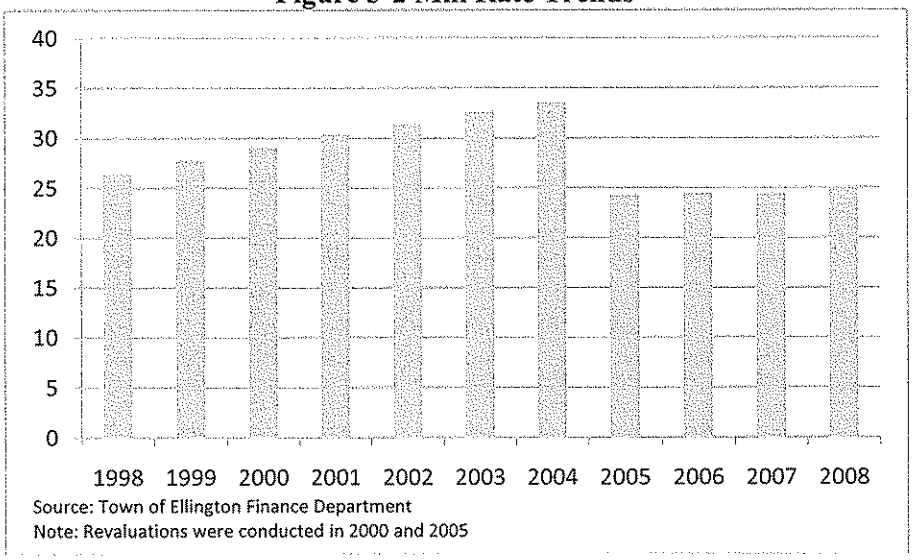
TABLE 3-4 MUNICIPAL EXPENDITURE TRENDS						
	FY 2005	FY 2006	FY 2007	FY 2008	$ Change 05-08	$ Change 05-08
General Government	$1,205,245	$1,229,050	$1,264,086	$1,302,458	$97,213	8.1%
Boards and Agencies	$84,159	$157,397	$118,029	$89,526	$5,367	6.4%
Public Safety	$1,516,858	$1,722,278	$1,884,141	$1,983,998	$467,140	30.8%
Public Works	$2,675,752	$2,881,666	$2,730,732	$3,025,277	$349,525	13.1%
Recreation	$259,018	$284,701	$332,231	$348,643	$89,625	34.6%
Library	$402,945	$415,074	$494,781	$527,374	$124,429	30.9%
Human Services	$414,167	$407,330	$426,072	$433,578	$19,411	4.7%
Town Properties	$298,235	$307,641	$360,807	$376,101	$77,866	26.1%
Debt Service	$3,034,486	$3,153,606	$3,090,635	$3,371,712	$337,226	11.1%
Miscellaneous	$1,640,165	$1,982,996	$2,046,664	$2,122,644	$482,479	29.4%
Capital Outlays	$833,370	$1,039,315	$1,287,749	$934,602	$101,232	12.1%
Education	$23,098,061	$23,888,102	$25,221,402	$26,671,829	$3,573,768	15.5%
Total	$35,462,461	$37,469,156	$39,257,329	$41,187,742	$5,725,281	16.1%
Source: Town of Ellington Basic Financial Statements and Supplemental Schedules						

TABLE 3-5 GRAND LIST TRENDS						
	2004	2005	2006	2007	$ Change 04-07	% Change 04-07
Real Estate	$642,010,604	$1,009,183,036	$1,051,773,638	$1,084,639,621	$442,629,017	68.9%
Personal Property	$28,417,231	$30,797,135	$35,168,090	$36,474,209	$8,056,978	28.4%
Motor Vehicle	$89,508,166	$93,915,913	$97,427,183	$103,557,237	$14,049,071	15.7%
Total	$759,936,001	$1,133,896,084	$1,184,368,911	$1,224,671,067	$464,735,066	61.2%
Note: As of October in each respective year Source: Town of Ellington Annual Report						

Mill Rate Trends

A mill is a unit of monetary measure equal to 1/1000 of a dollar. The mill rate is a number determined by dividing the grand levy (amount of revenue required) by the grand list (total assessed value of all taxable property). The mill rate is then applied to each taxpayer's taxable property. As shown in Figure 3-2, the Town of Ellington's mill rate for the 2008 grand list was 25.0, and has remained steady since the last revaluation in 2005. Between 1998 and 2004, the Town's mill rate increased steadily by an average of 1 to 1.3 mills annually over the time period.

Figure 3-2 Mill Rate Trends



Credit Rating

According to the Town's latest bond prospectus in 2007, the Town has a good credit rating of A2 from Moody's Investment Services, Inc. (Moody's).

3.3 Airport Economic Impact

The following presents information on the direct economic impact of the Airport on the local and regional economy. The impacts include the jobs and wages directly attributed to the Airport.

Direct Economic Impacts

The economic impact of the Airport is related to the amount of economic activity generated directly or indirectly by the operations of the Airport, the business establishments at the Airport, or users of the facility. Airport businesses include Northeast Helicopters, Spoznick Aviation, Connecticut Parachutists, Inc., and one non-airport dependent firm, AA Auto Repair. Economic activity related to the Airport is generally measured by the (direct and indirect) wages from businesses that use or rely on the Airport, and the direct spending of Airport users.

Based on interviews with each of the business tenants at the Airport, it estimated that 19 full-time equivalent (FTE) jobs are generated directly by the Airport. Based on wage estimates provided by the CTDOL, these jobs generate approximately $787,000 per year in total wages (see Table 3-6).

Based on wage and employment multipliers provided by the U.S. Department of Commerce, Bureau of Economic Analysis, the 19 jobs and $787,000 in wages directly attributed to the Airport, indirectly contribute to another 17 jobs and $661,400 in wages. Assuming that one quarter of the indirect jobs and wages are generated within the local area (within the greater

Ellington region), the Airport likely supports approximately four jobs and about $165,300 in annual wages in the Ellington area.

While it was not fully analyzed in this study effort beyond estimated indirect wages and jobs, visitors to the Airport, such as the parachuters, contribute to the local economy by purchasing fuel or groceries and eating at local restaurants.

TABLE 3-6 ELLINGTON AIRPORT DIRECT ECONOMIC IMPACT

Establishment Name	Estimated FTE Jobs	Estimated Avg. Annual Wage [1]	Gross Wages
Northeast Helicopters	15	$35,298	$529,470
AA Auto Repair	2	$40,934	$81,868
Spoznick Aviation	2	$49,916	$99,832
CT Parachutists, Inc.	4	$18,905	$75,620
Total	19		$786,790

[1] Occupational wages provided by the Connecticut Department of Labor
Source: RKG Associates

Based on interviews with the Airport owner, business tenants and owners of aircraft based at the facility, it is apparent that the Ellington Airport is not a primary economic driver, but plays a supportive role in the local and regional economy. Due to the Airport's geographic location, limited runway length, and lack of permanent indoor aircraft storage facilities, the overwhelming majority of based aircraft and operations are recreational / training in nature (and not tied to business activity in Ellington or the surrounding communities).

However, one owner of an aircraft based at the Airport indicated that his aircraft was very important to his business operation, a Tolland-based industrial furnace brokerage firm employing four workers. According to the aircraft owner, the airport provides convenient access to his plane which he uses approximately 150 hours annually to access clients in locations which may not be conveniently accessed through commercial airlines.

In summary, the direct and indirect economic impact of the airport includes an estimated 36 jobs and $1.45 million in total wages. Most of this benefit is regional and not limited to the Town of Ellington.

3.4 Airport Financial Conditions

Airport Revenues

According to financial data provided by the airport owner, the airport had a revenue base of $314,800 in 2008 representing an increase of $86,700 (38 percent) since 2005. The airport owner indicates that the proportion of revenue from fuel sales (69 percent), rental income (28 percent) and tie-down income (3 percent) experience in 2008 has been consistent since 2005. Table 3-3 provides revenue trends for the airport between 2005 and 2008. Since the initial publication of

this report, the currently airport owner increased the tiedown fees by $10 per a month and hangar rates by $3 to $5 per a square foot per a month.

TABLE 3-7 AIRPORT REVENUE TRENDS

	2005	2006	2007	2008	$ Change 05-08	% Change 05-08
Fuel Sales[1]	$157,359	$178,142	$165,856	$218,594	$61,235	38.9%
Tie-Downs[1]	$6,842	$7,745	$7,211	$8,582	$1,740	25.4%
Rental Income[1]	$63,856	$72,290	$67,304	$87,638	$23,782	37.2%
Total	$228,056	$258,177	$240,371	$314,814	$86,758	38.0%

[1]*Based on revenue stream distribution provided by JLM Associates, Inc.*

Airport Expenditures

As shown in Table 3-8, the Airport had total expenditures of $298,700 in 2008 representing an increase of $83,100 (39 percent) since 2005. As shown, expenditures items vary widely from year-to-year depending on specific issues such as a building maintenance or environmental project. The purchase of aviation fuel represents the largest expenditure item at about 65 percent in 2008, and has gradually increased over time (from 51 percent in 2005).

From an overall financial condition, and based on the financial information provided, the Airport has turned an annual profit of about $12,500 to $16,100 or about 5 percent between 2005 and 2008. This operating profit appears to be at the expense of airfield maintenance. During this period only minimal expenditures on paving or major building refurbishments were conducted to the detriment of the airport's overall condition (See Appendices A and B).

TABLE 3-8 AIRPORT EXPENDITURE TRENDS						
	2005	2006	2007	2008	$ Change 05-08	% Change 05-08
Aviation Fuel	$109,324	$140,815	$128,827	$193,367	$84,044	76.9%
Accounting Fees	$2,676	$2,523	$2,496	$2,887	$212	7.9%
Water	$2,087	$3,133	$648	$666	-$1,421	-68.1%
Electricity	$489	$690	$702	$750	$261	53.3%
Professional Fees	$800	$200	$1,088	$4,119	$3,319	414.8%
Insurance	$5,585	$5,432	$4,232	$4,931	-$654	-11.7%
Property Taxes	$22,334	$12,402	$24,906	$24,957	$2,623	11.7%
Personal Property Taxes	$0	$0	$105	$81	$81	-
CT Business Tax	$0	$0	$0	$754	$754	-
Postage	$270	$148	$198	$172	-$97	-36.1%
Maintenance	$13,841	$10,275	$7,670	$8,042	-$5,798	-41.9%
Paving	$325	$0	$0	$0	-$325	-100.0%
License Fees	$50	$25	$25	$335	$285	570.0%
Printing	$126	$22	$51	$136	$10	8.1%
Office	$0	$0	$0	$220	$220	N/A
Environmental	$640	$4,210	$2,504	$4,825	$4,185	653.9%
Bank Fees	$180	$17	$0	$0	-$180	-100.0%
Mortgage & Interest[1]	$56,844	$56,352	$57,459	$52,464	-$4,380	-7.7%
Total	$215,570	$236,245	$230,912	$298,707	$83,137	38.6%

[1] Mortgage principal payment estimate provided by JLM Associates, Inc.

Source: JLM Associates, Inc.

3.5 Airport Market Conditions

The following provides an analysis of the current market conditions for airport facilities and services within the Greater Hartford and south-central Massachusetts regions. For the purposes of this analysis, six airports were identified as the primary competitive facilities to Ellington Airport. These facilities included:

- Robertson Field Airport (Plainville, CT)
- Skylark Airpark (East Windsor, CT)
- Simsbury Airport (Simsbury, CT)
- Hartford-Brainard Airport (Hartford, CT)
- Southbridge Municipal Airport (Southbridge, MA)
- Windham Airport (Willimantic, CT)

These airports were selected as they represent the most likely competition to Ellington Airport due to their proximity (within a forty-five minute drive from Ellington). It should be noted that although Bradley International Airport (Windsor Locks, CT) and Barnes Municipal Airport (Westfield/Springfield, MA) fall within the forty-five minute drive area, these airports were not identified as competitive facilities to Ellington Airport as their facilities are significantly larger (9,000 foot runways) and cater to large aircraft that cannot be accommodated at Ellington.

Demand for Aviation-Related and Airport-Dependent Land and Buildings

Based on interviews with airport managers and real estate professionals, as well as analysis of commercial, industrial and office real estate listing information, there appears to be only a modest demand by aviation-related or airport-dependent businesses within the Greater Hartford and south-central Massachusetts regions. It is also clear that many non-aviation related and non-airport dependant industrial, warehouse and flex[1] end-users have located to airport industrial parks due to these areas containing competitively priced land located near major road transportation corridors, rather than due to the airport facility itself.

Furthermore, coinciding with the downturn in the economy, airport managers and FBO operators at competitive airports within the region indicated that there is currently minimal demand for new indoor aircraft storage space. This finding is a dramatic turn in the indoor aircraft storage market conditions from just a few years ago when the economy was stronger. Indoor aircraft storage space, generally in the form of T-hangar condominiums or rentals[2], is generally preferred by aircraft owners as the rising cost of aircraft ownership has prompted many owners to protect their investments from the outside weather elements.

Airport managers and FBO operators at competitive airports indicated that as the economy has weakened, aircraft owners have sought more affordable storage options (such as tie-downs), have reduced their flying time, or have sold their aircraft entirely. While the occupancy for existing indoor aircraft storage units was near 100 percent just a few years ago and airport managers were considering building more hangars, occupancy has decreased and plans to build new hangars have been scrapped due to lagging demand.

As another indicator of lagging aircraft activity due to the recession, fuel sales at each of the competitive airports have declined. An FBO owner at one of the competitive airports indicated that fuel sales have declined by 40 percent (from 250,000 gallons annually to 125,000 gallons) over the past few years. With fuel sales typically being a significant source of revenue for airports, the decline in fuel sales has negatively impacted each airport's bottom line.

Older T-hangar units are currently renting for approximately $112 to $350 per month depending on the age and condition of the hangar, as well as available amenities such as heat and electricity. Newer construction T-hangars are renting for $400 per month. Older condominium T-hangars are selling for $26,000 to $28,000 (plus a monthly condominium fee of $185), while newer hangars are selling for $60,000 to $70,000. Conventional hangars are currently renting for approximately $230 and $1,700 per month depending on the size of the aircraft being stored, as well as available hangar amenities such as heat, office space and bathroom facilities.

Although tie-downs are a more affordable aircraft storage option compared to indoor storage, all of the competitive airports have plenty of tie-down spaces available. For example, Southbridge Municipal Airport has approximately 80 tie-down spaces, with only 12 aircraft currently tied-

1 A building designed with flexible interior partitions which can be moved to create alternative space configurations based on user requirements.

2 A T-hangar is defined as a building composed of partitioned units designed to house one aircraft in each unit and having single door openings for each unit. T-hangars are commonly used for smaller single-engine aircraft.

down. Ellington Airport currently leases tie-downs for $40-$50 per month (depending on the lease term) which is in-line with the State of Connecticut's monthly tie-down fees at Hartford-Brainard, but above the State's tie-down fees at Windham Airport ($25-$40). Current tie-down fees at Ellington are well below the fees at the other competitive airports (which range from $70 to $85 per month).

Discussions with the Ellington Airport owner and aviation-related tenants indicated that the overwhelming majority of the Airport's operations are recreational or training in nature. The nature of Ellington Airport's aircraft activity (estimated at approximately 45 operations per day[3]) would be comparative to Simsbury Airport, Skylark Airport, Windham Airport and Southbridge Municipal Airport (which indicated that most of their based aircraft and operations would be considered recreational). The other competitive airports (Robertson Field, and Hartford-Brainard Airport) have significantly higher proportions of business operations and corporate based aircraft. For example, it is estimated that 50 percent of Robertson Field and Hartford-Brainard's operations and/or based aircraft are used for business purposes.

3.6 Airport Financial Feasibility

This section analyzes the future financial conditions of the Airport based on three alternative acquisition scenarios. Each of the scenarios estimates potential Airport revenues and expenditures (operating and capital) based on adjustments to airport demand variables (such as based aircraft, fuel sales, etc.), as well as foreseeable necessary airport facility maintenance and improvement costs. The financial forecasts are for the next 12 years through 2022 based on the respective capital improvements needed under each acquisition scenario.

The following assumptions are constant within each of the acquisition scenarios:

- The Town acquires the Airport using a combination of Federal and State grants as well as municipal funds, collects revenue from tie-down fees, building lease fees, and fuel flow fees and leases the facility to a fixed based operator (FBO). All revenue generated at the Airport must remain with the Airport rather than revert to the Town's general fund.
- The current property owner will pay for the necessary building repairs (estimated at $42,000) identified in this report as part of the sale agreement.
- Although the Town would not operate the Airport on a day-to-day basis, it would take responsibility for building structural maintenance and would cover electricity costs for runway lighting and common area security lighting. The FBO and other tenants would be responsible for all interior maintenance and fit-up of their leased buildings.
- Some on-site airport property management will be the responsibility of the FBO and tenants including care of the property immediately surrounding their leased buildings. The Town would be responsible for grass mowing, minor pavement maintenance and snow plowing, as well as more significant common-area maintenance such as fence repair work and obstruction removal, for example. In addition to on-site property management, the Town will incur costs associated with the airport's administration and

3 See Appendix H – Forecast of Aviation Demand

management in order to oversee the Airport's capital improvement plan, provide grant assurance administration, and airport planning.

- A field mower unit would need to be purchased by the Town to maintain the airport grounds.
- Airport revenue and expenditure estimates are based on financial information provided by the Airport's owner, the Town and comparable airports in Connecticut and Massachusetts as provided by airport management officials.
- Airport capital and acquisition costs included in the financial model represent only the municipal portion of projected costs (with the remainder covered by State and Federal sources at current funding levels or private developers/tenants). Capital costs are provided as an average annual cost over the entire planning period. The acquisition cost is based on the market value of the property based on information provided by the Town of Ellington's Assessor's Office.
- The airport is acquired in 2010 in order to match the year of the remaining financial data (actual acquisition would be unlikely before 2012).
- The runway length is 2,500 feet.

Sources of Revenue

Under the Town's ownership, the Airport would have the following sources of annual revenue:

Aircraft Tie-Down Fees – The current Airport owner collects tie-down fees (between $40 and $50 per month) from aircraft based at the facility. Current market prices for aircraft tie-downs in the region range from $70 to $85 per month. For the purposes of this analysis, a monthly tie-down fee of $70 was used under Town Ownership.

Building/Facilities Rent – Any tenants at the Airport (such as the FBO) would lease airport buildings (shop space, hangars and offices, etc.) from the Town. Based on the condition of the buildings and current market conditions, a lease rate of $3/SF for office space and $5/SF for light industrial/shop space was used.

Fuel Flow Fee – Many airport owners generate revenue by collecting a fee from the FBO for every gallon of fuel sold at the airport. This fee is generally rolled-into the price of fuel and is therefore collected from purchasers of fuel. It is assumed that the FBO would purchase and sell aviation fuel using the Airport's existing fuel system. A fuel flowage fee of $0.05/gallon is used in the financial feasibility analysis. According to the Airport owner, approximately 30,000 gallons of fuel is sold at the facility annually.

Sources of Expenditures

Depending on how airport grounds and building maintenance responsibilities are structured between the Town, the FBO, and other tenants, the Town would have a number of airport operating and capital expenditures. A description of these annual expenses is as follows:

Electricity – The Town would be responsible to cover electricity costs related to airfield, apron and street lights at the facility (estimated at $1,000 per year). The FBO and property tenants would be responsible to cover their own electricity costs. The Airport currently has an electricity cost of approximately $800 (based on a 2008 estimate).

Insurance – In order to cover any liability damages at the airport, the Town would likely need additional insurance coverage specific to the airport. Insurance coverage at comparable airports ranges from approximately $8,900 (Sanford Regional Airport) to $17,000 (Robertson Field). For the purposes of this study, a $15,000 insurance cost estimate has been used.

Property Maintenance – The Airport owner is currently responsible for common area maintenance at the facility, including grass cutting, snow plowing and minor runway repairs. The Town of Ellington has indicated that it would complete all airport property maintenance "in-house" with municipal staff and equipment. It is assumed that the Town would incur a cost of approximately $10,300 to complete these tasks.

Building Maintenance – Although building "fit-up" and day-to-day maintenance of airport buildings would be the responsibility of the FBO and tenants, the Town would be responsible for major building structural repairs and maintenance. An annual building maintenance cost of $5,000 has been budgeted.

Fuel System Maintenance – A cost of $1,500 was allocated to cover annual fuel system maintenance.

Equipment Maintenance – As the Town would be responsible for property maintenance such as grass mowing and snow plowing, $1,500 has been budgeted for any unforeseen maintenance that may be required on municipal equipment.

On-Site Airport Management – It is assumed that the FBO would essentially be the "face of the airport" for airport visitors and be responsible for on-site day-to-day airport management. This may include notifying the Town about airport issues or calling emergency service personnel should they be required. The cost for these services was estimated at $10,000 per year.

Legal/Professional Services – It is likely that the Town would require additional legal and professional services over the planning period to provide technical assistance related specifically to the Airport. The cost for these services was estimated at $5,000 per year.

Town Administration - In addition to some on-site property maintenance, the Town will incur costs associated with the Airport's administration and management in order to oversee the Airport's improvement plan, provide grant administration and airport planning. Discussions with municipal officials indicated that staff is at or near capacity, particularly so with public works staff. It is anticipated that an additional part time staff position would be needed to address airport-related maintenance. As it is likely that this position would be a new part-time staff member, or effectively take the equivalent time from existing Town staff (financial record keeping, engineering, planning, First Selectman, etc.), an estimated cost of $40,000 has been budgeted.

Financial Feasibility – Scenario 1: Baseline

Scenario 1 (Baseline) is based on the assumption that the Airport will continue to operate under current demand conditions. Under this scenario, the Town would acquire the Airport and lease the facility to an FBO, who would operate the facility on a day-to-day basis, and other tenants. Other assumptions include:

- With the exception of electricity costs (which are assumed to increase annually by 8 percent), all revenues and operating expenditures were assumed to increase at an average annual rate of 3 percent (to account for inflation).
- The amount of aviation fuel sold annually increases from 30,000 to 32,000 gallons over the planning period to coincide with the forecasted based aircraft and operations estimates.

As shown in Table 3-9, the Airport is expected to generate revenues of about $119,500 in FY 2010, and increase to about $171,000 in FY 2022. Approximately 77 percent of the Airport's revenue stream would be attributed to facility lease fees with the majority of the remainder being aircraft tie-down fees.

Total expenditures (operating and capital) would be approximately $141,000 in FY 2010 and increase to about $166,000 in FY 2022. Table 3-10 displays the capital improvement plan and cost estimates used for the Baseline Scenario. This scenario includes several pavement maintenance projects and the construction of three conventional hangars.

Based on the assumptions stated, the projected net cash flow for the Airport under this scenario is positive (by approximately $4,000 to $5,000 annually excluding FY 2010) over the thirteen-year planning period. Additionally, as the existing airport is currently privately owned and is taxable property, under municipal ownership the Town will not receive property tax revenues (estimated at approximately $25,500). As such, when the opportunity cost of losing this revenue (inflated at 3 percent over the planning period) is considered, it generates a net negative annual balance of $22,000 to $31,000 (again excluding FY 2010) over the entire thirteen-year planning period. This negative net balance cumulatively accrues to a loss of approximately $368,000 at the end of the planning period.

Financial Feasibility – Scenario 2: Growth

Scenario 2 (Growth) is based on the assumption that the runway length is increased from 1,800 feet to at least 2,500 feet with the improved facility attracting new based aircraft and supporting more aircraft operations. Under this scenario, land would be leased to a developer and 17,500 SF of new hanger space (contained within four buildings) would be constructed between FY 2014 and FY 2022. Other assumptions include:

- With the exception of electricity costs (which are assumed to increase annually by 8 percent), all revenues and operating expenditures were assumed to increase at an average annual rate of 3 percent (to account for inflation).

- The amount of aviation fuel sold annually increases from 30,000 to 35,000 gallons over the planning period to coincide with the forecasted based aircraft and operations estimates.
- The Town collects $0.15/SF annually for land leased to a developer for hangar construction.
- The Town collects property taxes on the value of the privately developed hangars assessed at 70 percent of the assumed construction cost of $50/SF at the Town's current mill rate of 25.0. It is assumed that a 10,000 SF 10-bay T-hangar is built in FY 2014, with additional 2,500 SF conventional hangars built in each of FY 2017, FY 2019 and FY 2022
- Due to the improved facilities and increased airport activity, the following costs have been adjusted:
    - Electricity costs increase to $1,200
    - Insurance costs increase to $17,000

As shown in Table 3-11 the Airport is expected to generate revenues of about $119,500 in FY 2010, and increase to about $230,500 in FY 2022. The Airport's revenue stream is increased by about $60,000 compared to Scenario 1 due to land lease fees and property taxes on the hangars.

Total expenditures (operating and capital) would be approximately $143,300 in FY 2010 and increase to about $169,300 in FY 2022. Table 3-12 displays the capital improvement plan and cost estimates used for the Growth Scenario.

Based on the assumptions stated, the projected net cash flow for the Airport under this scenario is positive (excluding FYI 2010). However, when the opportunity cost of the loss of property taxes is factored into the financial equation, a negative net annual balance is estimated over the first five years of the planning period. Coinciding with the revenue (land lease and property taxes) generated from the private hangars; the net negative balance turns positive in FY 2015 (by $2,400) and remains positive over the remainder of the planning period. Even with the injection of revenue from the privately held hangars, the airport generates a negative cumulative net balance of $28,000 over the planning period.

It is clear from the Growth scenario that additional revenue sources beyond the existing capacity are necessary to the financial viability of the airport. The Growth scenario depicts this additional revenue through the development of hangars, which provides additional lease revenue for the Town. With this, it may be a challenge for the Town to secure a developer that is willing to take on the risk of such a project until the airport's other capital improvement projects to upgrade the facility are complete or the market demand for hangars increases.

Financial Feasibility – Scenario 3: Decline

Scenario 3 (Decline) is based on the assumption that activity (based aircraft and operations) at the Airport declines due to continued poor market conditions. No hangars are constructed, but paved tie-downs replace the existing turf parking area for aircraft. Other assumptions include:

- With the exception of electricity costs (which are assumed to increase annually by 8 percent), all revenues and operating expenditures were assumed to increase at an average annual rate of 3 percent (to account for inflation).
- The amount of aviation fuel sold annually decreases from 30,000 to 23,000 gallons over the planning period to coincide with the forecasted reduction in based aircraft and operations.

As shown in Table 3-13, the Airport is expected to generate revenues of about $117,700 in FY 2010, and increase to about $162,300 in FY 2022. Tie-down fees increase only modestly over the planning period, while fuel flow fees decline.

Total expenditures (operating and capital) would be approximately $141,000 in FY 2010 and increase to about $166,000 in FY 2022. Table 3-14 displays the capital improvement plan and cost estimates used for the Decline Scenario. This scenario includes several pavement maintenance projects and the construction of an apron for paved tiedowns, but does not include the construction of any hangars.

Based on the assumptions stated, the projected net cash flow for the Airport under this scenario starts positive (by $2,000) in FY 2011 (excluding FY 2010) and gradually slides negative (by $3,600) by the end of the planning period. When the opportunity cost of the loss of property taxes is factored into the financial equation, a net negative annual balance of $24,300 to $40,000 (excluding FY 2010) is estimated over the planning period. This net negative balance accrues to a loss of approximately $429,000 over the planning period.

Summary of Scenarios

As shown, the alternative acquisition scenarios analyzed generate a range of cash flows (some negative and some positive) for the Town. However, as stated, the alternative acquisition scenarios are based on the assumptions used. Should unforeseen economic, market or funding assumptions change, the results of the financial forecast would also change. For example, a change in the Federal, State and local funding model from 95 percent Federal, 3.75 percent State, and 1.25 percent local to 90 percent Federal, 7.5 percent State and 2.5 percent local, would drive the Baseline and Decline scenarios' cash flow further negative (up to $7,900 to $16,600 annually). The cash flow for Growth scenario would remain positive in this situation, however, when lost property taxes are factored in, the net balance is negative over the entire planning period.

Furthermore, the "Great Recession" has dampened GA activity in Connecticut (and in most states) with many aircraft owners flying less, purchasing less fuel, etc. This reduced demand and increased market uncertainty would likely increase the risk for an FBO or developer to lease airport land and build aircraft hangar storage facilities. As GA activity is tied directly to the overall economic climate, it is reasonable to assume that activity will increase with the improving economy over the next one to three years. How much rebound the GA market experiences with an improved economy is uncertain.

Due to the market uncertainty and conservative assumptions used, the Baseline scenario may be considered to be the most realistic alternative acquisition scenario. Under this scenario, it is

unlikely that the facility would have positive cash flow. Nevertheless, the Airport could be municipally-owned and would require a subsidy from the Town (i.e., approximately $5,000 in negative cash flow or $35,000 annual when lost tax revenue is considered). Should the economy, GA market conditions and the airport's facilities improve to the degree that an investor (or investors) be willing to develop private aircraft storage hangars at the airport, the potential exists for the facility to have positive cash flow as under the growth scenario. Furthermore, it is possible that activity and airport use could exceed that of the growth scenario, if economic conditions rebound well and airport improvements successfully attract new users. However, which such an outcome is possible, its probability cannot be determined.

It is suggested that the Town establish and understand their level of risk relative to acquiring the airport or any other type of investment. The Town's decision to potentially acquire the airport should not be made exclusively on the financial "success or failure" of the facility, but rather on the collection of costs and benefits (economic and non-economic) to the community.